

Title (en)  
POLISHING COMPOSITIONS AND METHODS OF USE THEREOF

Title (de)  
POLIERZUSAMMENSETZUNGEN UND VERFAHREN ZU IHRER VERWENDUNG

Title (fr)  
COMPOSITIONS DE POLISSAGE ET LEURS PROCÉDÉS D'UTILISATION

Publication  
**EP 3601460 A4 20200422 (EN)**

Application  
**EP 18775533 A 20180327**

Priority

- US 201715472788 A 20170329
- US 2018024543 W 20180327

Abstract (en)  
[origin: US2018282580A1] and 4) water; in which the composition does not include tetramethylammonium hydroxide or a salt thereof. The variables n, R1-R7, X, Y, and Z1-Z3 in structures (I) and (II) are defined in the Specification. The synergistic effect of the compounds of structures (I) and (II) in these chemical mechanical polishing compositions leads to high polysilicon films material removal rate during polishing.

IPC 8 full level  
**C09G 1/02** (2006.01); **C09K 13/02** (2006.01); **H01L 21/321** (2006.01)

CPC (source: CN EP KR US)  
**C09G 1/00** (2013.01 - US); **C09G 1/02** (2013.01 - CN EP KR US); **C09K 13/02** (2013.01 - EP US); **C23F 1/10** (2013.01 - US); **H01L 21/30625** (2013.01 - CN); **H01L 21/3212** (2013.01 - CN EP KR US)

Citation (search report)  
[I] WO 2014123126 A1 20140814 - MITSUBISHI CHEM CORP [JP]

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**US 10106705 B1 20181023**; **US 2018282580 A1 20181004**; CN 110461970 A 20191115; CN 110461970 B 20220211; CN 114456717 A 20220510; EP 3601460 A1 20200205; EP 3601460 A4 20200422; JP 2018170485 A 20181101; JP 6904087 B2 20210714; KR 102614303 B1 20231214; KR 20190129894 A 20191120; KR 20230172616 A 20231222; SG 11201908327U A 20191030; TW 201837131 A 20181016; TW 202132494 A 20210901; TW I730084 B 20210611; TW I790614 B 20230121; US 10703937 B2 20200707; US 11499071 B2 20221115; US 2019055431 A1 20190221; US 2020224058 A1 20200716; WO 2018183310 A1 20181004

DOCDB simple family (application)  
**US 201715472788 A 20170329**; CN 201880020925 A 20180327; CN 202210053475 A 20180327; EP 18775533 A 20180327; JP 2017119671 A 20170619; KR 20197028233 A 20180327; KR 20237042769 A 20180327; SG 11201908327U A 20180327; TW 106113630 A 20170424; TW 110117521 A 20170424; US 2018024543 W 20180327; US 201816166289 A 20181022; US 202016832739 A 20200327